

Q P CODE: 104326

Reg. No:

**First Year Pharm D Degree Supplementary Examinations
December 2017
Pharmaceutical Organic Chemistry**

Time: 3 Hours

Total Marks: 70

- Answer all Questions.
- Write equation wherever necessary.

Essay

(3x10=30)

1. Explain Bayer's strain theory and its limitations. Give any four preparation methods for cycloalkanes.
2. Give the reaction and mechanism involved in Knoevenagel condensation and Perkin's condensation.
3. Explain the mechanism and orientation of E₂ reaction using Saytzeff's rule.

Short notes:

(8x5=40)

4. Explain the orbital picture of allyl radicals.
5. Give the classification and general methods of preparations of alcohols.
6. Give reactions for Fries rearrangement and Sand Meyer's reaction.
7. What is a diazotization reaction. Give the reactions of diazonium salts
8. Give 1, 2 and 1, 4 addition in conjugated dienes with a suitable mechanism.
9. Discuss the formation of acid chlorides, esters and amides.
10. Explain the concept of resonance and hyper conjugation.
11. Give the nitration and sulphonation reaction of benzene.
